



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,088	10/24/2003	Mark G. Fontenot	4012.13	8477

23308 7590 11/02/2006

PETERS VERNY JONES & SCHMITT, L.L.P.  
425 SHERMAN AVENUE  
SUITE 230  
PALO ALTO, CA 94306

EXAMINER

ROBERTS, LEZAH

ART UNIT PAPER NUMBER

1614

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/693,088	<b>Applicant(s)</b> FONTENOT, MARK G.	
	<b>Examiner</b> Lezah W. Roberts	<b>Art Unit</b> 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 7-13, 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 14-18, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01 Mar 2005</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Response to the Restriction Requirement and Election of Species***

Claims 7-13 and 19-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on October 4, 2006. Applicant argues all the pending claims and species can be easily examined in one application. Applicant has also stated the amended claims should change the groupings of the claims. These arguments are not persuasive.

The compositions disclosed by Applicant can be used in laundry detergents and therefore a search for the compositions will give results traversing different arts. In regards to the election of species, the whitening agents have different structures, properties and mechanisms for whitening therefore one whitening agent is not suitable for all applications. Claims 1-6 and 14-18 will be examined on the merits. It is believed Applicant has withdrawn claim 14-18 erroneously. The amended claims do not change the grouping of the invention. The requirement is FINAL.

### ***Claims***

#### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1614

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1) Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Sagel et al. (US 2001/0053375).

Sagel et al. disclose delivery systems for tooth whiteners. The compositions may comprise combinations of whitening agents, which include hydrogen peroxide and hypochlorites (paragraph 0040). The compositions may be in the form of liquid, paste, gel or solution, which is applied or coated onto a strip of material (paragraph 0036). The oral care substances may be separated layers of components. The compositions may also comprise a fluoride source as an anti-caries agent. The pH ranges from 4.5 to 11 (paragraph 0076). The reference anticipates the claims insofar as it discloses a kit comprising a hypochlorite solution having a pH of about 8.5 up to 13, and a means for applying the solutions to the surface of the teeth.

2) Claims 21-22 are rejected under 35 U.S.C. 102(b) as being anticipate by Ambuter et al. (US 5,997,764).

Ambuter et al. disclose thickened bleach solutions that may be used in oral care. The compositions comprise hypochlorite including sodium, potassium and calcium hypochlorites (col. 5, lines 1-4). The compositions have pH values above about 10 and are preferred because essentially all of the active chlorine is reported to be in the form of the hypochlorite ion (col. 5, lines 28-32). The hypochlorite is included in the compositions at a concentration of about 5% (col. 12, first table). Rheology stabilizers

Art Unit: 1614

are incorporated into the compositions at concentrations ranging from preferably 0.005% to 5%. They include methyl salicylate (col. 8, see table), encompassing claim 22. The reference anticipates the instant claims insofar as it discloses a compositions comprising sodium hypochlorite having a pH greater than about 8.5 to about 13 and a flavoring agent.

### **Claim Rejections - 35 USC § 103 - Obviousness**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1) Claims 1-6 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howes (US 2002/0098246).

Howes discloses a two-component system wherein one part comprises sodium hypochlorite and the second part comprises hydrogen peroxide (see Abstract). The compositions are mixed before use and may be used for dental plaques (paragraph

Art Unit: 1614

0123). The compositions may also comprise pH modifiers (paragraph 0039). The pH of the hypochlorite is not disclosed but hypochlorite is an alkaline compound<sup>1</sup>. The reactants, peroxide and hypochlorite anion, may be delivered in whatever physical form is desirable for the user, for example, solutions, gels, solids, semi-solids, pastes, powders, mists and sprays (paragraph 0080). The intended use of the compositions carries no weight in determining patentability because the compositions of the reference are substantially the same, comprising sodium hypochlorite and hydrogen peroxide and may be used orally, as the compositions of the instant claims. Therefore the compositions of the reference may be used to whiten teeth since the compositions of the reference and the compositions of the instant claims are substantially the same. The reference differs from the instant claims insofar as it does not disclose the hypochlorite solution has a pH greater than about 8.5 to about 13.

Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves the application of no more than routine skill in the art. In re Aller 105 USPQ 233, 235 (CCPA 1955). It would have been obvious to one of ordinary skill in the art to have adjusted the pH of the hypochlorite to the alkaline range disclosed motivated by the desire to optimize the reaction between the peroxide and hypochlorite for optimal results, as supported by cited precedent.

---

<sup>1</sup> Wegner (US 2003/0151024) paragraph 0005, recites sodium hypochlorite is alkaline and a strong oxidizer.

Art Unit: 1614

2) Claims 1-4, 6 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over van den Bosch (US 6,017,515).

Van den Bosch discloses two part compositions that may be used to bleach teeth. The first component is a liquid component comprising sodium hypochlorite. The second component comprises sodium perborate (col. 2, lines 40-45). The compositions may also include fluoride and flavoring found in toothpastes (col. 4, lines 6-7). The reference differs from the instant claims insofar as it does not disclose the hypochlorite solution has a pH greater than about 8.5 to about 13.

Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves the application of no more than routine skill in the art. In re Aller 105 USPQ 233, 235 (CCPA 1955). It would have been obvious to one of ordinary skill in the art to have adjusted the pH of the hypochlorite to the alkaline range disclosed motivated by the desire to optimize the reaction between the perborate and hypochlorite for optimal results, as supported by cited precedent.

3) Claims 1-6, 14-17 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (US 2006/0060819).

Jung teaches oral compositions comprising two paste solutions that have decolorizing effects. The first paste comprises hydrogen peroxide and the second paste comprises sodium hypochlorite (see abstract). Each paste comprise 1% flavoring agent. The flavoring agents include peppermint, spearmint oil, menthol, carbon, anethole and

Art Unit: 1614

oegenol (paragraph 0054), encompassing claims 21-22. The paste solutions are stored in a dual container. The reference differs from the instant claims insofar as it does not disclose the hypochlorite solution has a pH greater than about 8.5 to about 13.

It would have been obvious to one of ordinary skill in the art to have adjusted the pH of the hypochlorite to the alkaline range disclosed motivated by the desire to optimize the reaction between the peroxide and hypochlorite for optimal results, as supported by cited precedent above.

Claims 1-6, 14-18 and 21-22 are rejected.

Claims 7-13 and 19-20 are withdrawn.

No claims allowed.

#### **Additional Prior Art Made of Record**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Access: Special Supplemental Issue "Whiter Teeth, Brighter Smiles" September 1999. The reference discloses a method of whitening teeth applying hydrogen peroxide to the teeth followed by applying a sodium hypochlorite solution (page 8, col. 2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lezah W. Roberts whose telephone number is 571-272-1071. The examiner can normally be reached on 8:30 - 5:00.



Art Unit: 1614

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lezah Roberts  
Patent Examiner  
Art Unit 1614



Frederick Krass  
Primary Examiner  
Art Unit 1614

